

# **COPY FOR IB**

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# **PCT**

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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

	(PCT Artcle 36 and R	uie 70)		
Applicant's or agent's file reference FP03046PC	FOR FURTHER ACTION		onofTransmittalofInternation Report (Form PCT/IPEA/41	
International application No.	International filing date(day/mor	th/year)	Priority date (day/month/)	year)
PCT/KR2003/002063	07 OCTOBER 2003 (07.10.2003)		07 OCTOBER 2002 (07.10.2002)	
International Patent Classification (IPC)  IPC7 E02D 17/04  Applicant				
amended and are the basis i	t according to Article 36.  of sheets, include anied by ANNEXES, i.e., sheets for this report and/or sheets contact the Administrative Instructions under the Instruction under	ling this cover so of the description	heet. on, claims and/or drawings	which have been
V X Reasoned statemen citations and explan	of opinion with regard to novelty vention at under Article 35(2) with regard nations supporting such statement	to novelty, inve		icability;
Date of submission of the demand  06 MAY 2004 (06	Date 5.05.2004)		of this report RY 2005 (27.01.2005)	
Name and mailing address of the IPEA  Korean Intellectual Proper 920 Dunsan-dong, Seo-gu Republic of Korea  Facsimile No. 82-42-472-7140	rty Office , Daejeon 302-701,	orized officer  CHOI, Woo Jo  phone No. 82-		10 m

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International aplication No. PCT/KR2003/002063

I.	I. Basis of the report					
ı.	With	th regard to the elements of the international application:*				
		the international application as originally filed				
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		pages 1 - 23 , as original pages , filed with the				
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	X	pages , as original				
		pages, as amended (together with any statment) under				
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	Ш	the sequence listing part of the description:  pages, as original	v filed			
		pages, filed with the d	emand			
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	:					
2.	. the	Vith regard to the language, all the elements marked above were available or furnished to this Authority in the language in the international application was filed, unless otherwise indicated under this item.  These elements were available or furnished to this Authority in the following language English	ge in which _which is			
		the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).				
1	X	<b>-</b>				
		the language of the translation furnished for the purposes of international preliminary examination (under Rul or 55.3).	es 55.2 and/			
3		With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international application application, the international application	ational			
		contained inthe international application in written form.				
1		filed together with the international application in computer readable form.				
		furnished subsequently to this Authority in written form.				
		furnished subsequently to this Authority in computer readable form				
		The statement that the subsequently furnished written sequence listing does not go beyond the disc lo international applicationas as filed has been furinshed.	sure in the			
		The statement that the information recorded in computer readable form is identical to the written sequence been furnished.	listing has			
4	. <u>X</u>					
		the description, pages NONE				
		X the claims, Nos. 7	······································			
		X the drawings, sheets NONE				
5		This report has been established as if (some of) the amendments had not been made, since they have been go beyond the disclosure as filed, as indicated in the Supplemental Box(Rule 70.2(c)).**	n considered to			
,	in i	Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 an In this opinion as "originally filed." and are not annexed to this report since they do not contain amendments (Ri Ind 70.17).				
	** An	Any replacement sheet containing such amendments must be referred to under item I and annexed to this report.				

#### INTERNATIONAL PRELIMINARY EXAMINATION

International aplication No.

PCT/KR2003/002063

# V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement			
Novelty (N)	Claims	1-6, 8-26	YES
	Claims	NONE	NO
Inventive step (IS)	Claims	1-6, 8-26	YES
	Claims	NONE	NO
Industrial applicability (IA)	Claims	1-6, 8-26	YES
	Claims	NONE	NO

### 2. Citations and explanations (Rule 70.7)

#### 1. Subject-Matter

This statement is based on the amended claims 1-6 and 8-26 filed with the letter of December 8,2004. The subject-matter of the present application relates to a prestressed support system for prestressing supporting members by using tendons in vertical piles such as H-beams and horizontal piles such as wales when an underground structure is built.

2. Prior Art 

D1: KR 10-188465 B1 (12 January 1999) D2: JP 2000-297590 A (24 October 2000)

D1 relates to a sheathing method by prestressing, comprising the steps of: inserting an excavation pile in a longitudinal direction; installing a wale in a horizontal direction on a front surface of the pile and supporting the connection corner by a strut; attaching a double wale onto the surface of the wale by a bolt; installing a bracket at both ends of the double wale and fixing the bracket thereto by an anchor block; and inserting a cable into the hole of the bracket and coupling a nut with a sleeve which is pressed by said cable, thereby maintaining the tension of the cable, generating a prestress moment on the double wale, and resisting the earth pressure.

D2 relates to an excavation wall construction method requiring no earth retaining timbering for performing construction or reconstruction in a narrow space and for decreasing the construction time and construction cost.

#### 3. Novelty

Neither of the available prior art documents D1 and D2 discloses or suggests the subject-matter of the present application. Therefore, novelty can be acknowledged for the subject-matter of claims 1-6 and 8-26 of the present application.

#### 4. Inventive Step

According to the detailed description and the claims amended by the amended sheet of 2004.12.08, the present application has several advantages. Therefore, an inventive step can be acknowledged for the subject-matter of claims 1-6 and 8-26 of the present application.

#### 5. Industrial Applicability

Industrial applicability can be acknowledged for the subject-matter of claims 1-6 and 8-26 of the present application.